Complete Summary

TITLE

Use of imaging studies for low back pain: proportion of health plan members with acute low back pain for whom imaging studies did not occur.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess whether imaging studies (plain X-ray, magnetic resonance imaging [MRI], computed tomography [CT] scan) are overused in evaluating patients with acute low back pain.

The measure is reported as an inverted rate [1 minus (numerator/denominator)]. A higher score indicates appropriate treatment of low back pain (i.e., proportion for whom imaging studies did not occur).

RATIONALE

Low back pain is a pervasive problem that affects two thirds of adults at some time in their lives. It rank among the top 10 reasons for patient visits to internists and the most common and expensive reason for work disability in the United States. Back problems are second only to cough among symptoms of people who

seek medical care at physician offices, outpatient departments or emergency rooms.

Back pain "triage" is the medical model of diagnosis used to exclude serious pathology. History and examination are used to identify diseases of an inflammatory, neoplastic, infective or metabolic nature, in addition to specific causes of mechanical pain, symptomatic disk prolapse, stenosis and instability. "Red flag" symptoms and signs are indicators of serious pathology. Around a third of patients report a risk factor, and 1 percent to 10 percent of these patients will have pathology.

There is little correlation between X-ray degenerative change and symptoms. Routine imaging is not recommended. X-rays show structural degenerative changes, but these should not be given clinical significance, as similar degenerative changes are seen in asymptomatic individuals. Once a suspicion of significant disease is aroused, then imaging is appropriate. However, the vast majority of patients have nonspecific low back pain with no identifiable cause.

PRIMARY CLINICAL COMPONENT

Acute low back pain; imaging studies (plain X-ray, magnetic resonance imaging [MRI], computed tomography [CT] scan)

DENOMINATOR DESCRIPTION

Health plan members age 18 years to 50 years as of December 31 of the measurement year with a new episode of low back pain (see the "Description of Case Finding" and "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

Members from the denominator who received an imaging study (plain X-ray, magnetic resonance imaging [MRI], computed tomography [CT] scan) conducted on the Episode Start Date* or in the 28 days following the Episode Start Date (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

*Episode Start Date: The earliest encounter during the measurement year with a primary low back pain diagnosis (refer to Table LBP-A in the original measure documentation).

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Overall poor quality for the performance measured
Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 18 to 50 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Back pain is among the most common masculoskeletal conditions, affecting approximately 31 million Americans, and is the number one cause of activity limitation in young adults. Approximately half of all U.S. adults report having some type of back pain in a given year, and two thirds of adults have back pain at some time in their lives. For most individuals, back pain quickly improves. Nevertheless, approximately 15 percent of the U.S. population reports having frequent low back pain that lasted for at least 2 weeks during the previous year. More persistent pain that lasts 3 to 6 months occurs in only 5 to 10 percent of patients with low back pain.

EVIDENCE FOR INCIDENCE/PREVALENCE

Lawrence RC, Helmick CG, Arnett FC, Deyo RA, Felson DT, Giannini EH, Heyse SP, Hirsch R, Hochberg MC, Hunder GG, Liang MH, Pillemer SR, Steen VD, Wolfe F. Estimates of the prevalence of arthritis and selected musculoskeletal disorders in the United States. Arthritis Rheum1998 May;41(5):778-99. PubMed

National Committee for Quality Assurance (NCQA). HEDIS 2006: narrative: what's in it and why it matters. Vol. 1. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 88 p.

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

See "Rationale" and "Incidence/Prevalence" fields.

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Health plan members age 18 years to 50 years as of December 31 of the measurement year, with a new episode* of low back pain and a Negative Diagnosis History** who were continuously enrolled 180 days prior to the Episode Start Date*** through 28 days after the Episode Start Date with no gaps in enrollment during the continuous enrollment period

*New Episode: The first claim/encounter during the measurement year that meets the qualifying diagnosis criteria (refer to Table LBP-A in the original measure documentation for codes to identify ambulatory encounters for low back pain) and a 180-day Negative Diagnosis History.

**Negative Diagnosis History: A period of 180 days (6 months) prior to the Episode Start Date during which time the member had no claims/encounters with any diagnosis of low back pain (refer to Table LBP-D in the original measure documentation).

***Episode Start Date: The earliest encounter during the measurement year with a primary low back pain diagnosis (refer to Table LBP-A in the original measure documentation).

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Health plan members age 18 years to 50 years as of December 31 of the measurement year, with a new episode* of low back pain and a Negative Diagnosis History** who were continuously enrolled 180 days prior to the Episode Start Date*** through 28 days after the Episode Start Date with no gaps in enrollment during the continuous enrollment period

*New Episode: The first claim/encounter during the measurement year that meets the qualifying diagnosis criteria (refer to Table LBP-A in the original measure documentation for codes to identify ambulatory encounters for low back pain) and a 180-day Negative Diagnosis History.

**Negative Diagnosis History: A period of 180 days (6 months) prior to the Episode Start Date during which the member had no claims/encounters with any diagnosis of low back pain (refer to Table LBP-D in the original measure documentation).

***Episode Start Date: The earliest encounter during the measurement year with a primary low back pain diagnosis (refer to Table LBP-A in the original measure documentation).

Exclusions
Members with a low back pain diagnosis within the previous 180 days (6 months) of the Episode Start Date should be dropped from the denominator.

Exclude members who have a diagnosis for which an imaging study in the presence of low back pain is clinically indicated. The managed care organization (MCO) should use codes from Table LBP-B of the original measure documentation to exclude members with the following diagnoses from the denominator.

- Cancer: The MCO should look for evidence of a cancer as far back as possible in the member's history through the end of the continuous enrollment period.
- Recent trauma, intravenous drug abuse, neurological impairment: The MCO should exclude members with any applicable diagnoses in the 12 months prior to the Episode Start Date through the end of the continuous enrollment period.

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter
Patient Characteristic

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
Members from the denominator who received an imaging study (plain X-ray, magnetic resonance imaging [MRI], computed tomography [CT] scan) conducted on the Episode Start Date* or in the 28 days following the Episode Start Date. Table LBP-C of the original measure documentation lists imaging studies to count toward the numerator.

*Episode Start Date: The earliest encounter during the measurement year with a primary low back pain diagnosis (refer to Table LBP-A in the original measure documentation).

Exclusions
Unspecified

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for Medicaid and commercial plans.

STANDARD OF COMPARISON

External comparison at a point in time
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Use of imaging studies for low back pain (LBP).

MEASURE COLLECTION

HEDIS® 2006: Health Plan Employer Data and Information Set

MEASURE SET NAME

Effectiveness of Care

DEVELOPER

National Committee for Quality Assurance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2004 Jan

REVISION DATE

2005 Jan

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

MEASURE AVAILABILITY

The individual measure, "Use of Imaging Studies for Low Back Pain (LBP)," is published in "HEDIS 2006. Health Plan Employer Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 74 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on May 25, 2005. The information was verified by the measure developer on December 15, 2005.

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